

VOLTAGE REGULATOR AND METHOD FOR REGULATING VOLTAGE

ABSTRACT OF THE DISCLOSURE

A voltage regulator for use in a charging device of a portable electronic apparatus is disclosed. The voltage regulator includes a transformer having a primary winding and a secondary winding, a switch circuit being controlled via a control end thereof so as to result in a variable current on the primary winding, a rectification circuit electrically connected to the secondary winding, and proceeding a charging operation in response to an induced current, and a microcontroller electrically connected to the switch circuit and generating a pulse width modulation (PWM) signal to the control end in response to the charging operation. In addition, a method for operating a voltage regulator is also disclosed.